GOVERNMENT OF MYSORE, STORES PURCHASE COMMITTEE, BANGALORE.

No. S. P. C. 2708-15, *dated 25th July* 1940.

To

The Firms dealing in Electrical Materials.

Enquiry No. 4163.

HIGH TENSION BUSHINGS FOR POWER TRANSFORMERS.

GENTLEMEN,

I write to request you to quote your best prices and earliest time of delivery for the following materials:—

Two High tension Bushings for use with power transformers of Messrs. A. C. E. C. conforming to the dimensions shown in the attached drawing and the following brief specifications:—

Nameplate details of A. C. E. C. Transformers.

Single phase, oil immersed, water-cooled Transformers, 4167 kVA. at ·85 power factor, 25 cycles, 78 kV—Star–2200-volts Delta.

The bushings shall be of the oil-filled type with high di-electric and mechanical strength and rated at not less than 92 kV. operating pressure. They shall consist of two, one-piece, wet-process porcelain assembled with clamping rings, earth sleeve or cylinder and terminals at both ends, providing an absolutely oil-tight structure round a series of spaced concentric cylinders of high die-electric strength with a central copper tube or rod and shall have at the line end a combined oil gauge and expansion chamber of amber glass to filter all light rays that cause the oil to sludge. The bushings will be filled with oil with the following characteristics:—

The oil is a pure mineral oil free from moisture, acids, alkali and sulphur.

1.	Specific Gravity at 60° C	0·87 to 0·90.
2.	Flash point not below	133° C.
3.	Burning point not below	148° C.
4.	Freezing point not above	Minus 40° C.
5.	Say-bolts viscosity at 37·8° C	55 seconds
6.	Contents: Inorganic acids, alkalies and free sulphate.	Nil.
7.	Neutralisation value of organic acid	Not higher than 0·05 mg. of KoH per gram of oil.
8.	Di-electric strength	Not lower than 22 kV. (RMS) as determined between horizontal electrodes 1″ dia. with their flat surfaces 0·1″ apart.
9.	Demulsibility	Not less than 25 seconds as determined by the A. S. T. M. Emulsion test. The oil regains 75 per cent of its original dielectric strength by allowing any water accumulation to settle out and 100 per cent by passing it through a blotting paper filter press.
10.	Colour	Clear or very pale amber.

All Porcelain and metal surfaces in contact with the gaskets shall be ground and machined true so as to form a perfectly straight structure from terminal to terminal. The line terminals and the Earth Sleeves shall be provided with shields which will produce a uniform distribution of pressure from line to earth.

The bushings shall have a power Factor not higher than 3·5 per cent at 40° C. and shall have flashover values of not less than:—

Wet	215 kV.
Dry	285 „

Flash-over tests shall be made at 25 cycles and otherwise according to B. S. S. or A. I. E. E. Specifications.

The price to be quoted should be for delivery, c.i.f., Madras.

This enquiry will close on the 23rd October 1940.

No. S. P. C. 2893-917, *dated Bangalore, 26th July* 1940.

To

The Firms dealing in Ball Frames.

Enquiry No. 4167.

BALL FRAMES REQUIRED DURING 1940-41.

GENTLEMEN,

Please intimate your best present day price for free delivery at the several Railway Stations in the State for the supply of Ball Frames of the following specification:—

Ball frame measuring $11\frac{1}{2}'' \times 11\frac{1}{2}''$ inside and $13\frac{3}{4}'' \times 13\frac{3}{4}''$ outside, frame work $1\frac{1}{8}'' \times \frac{3}{4}''$, strong joints at corners, supported by a couple of screws.

Balls—ten rows of ten each, same colour in each row, but different colour in different rows. Diameter $\frac{1}{2}'' \times 2/5''$ must slide easily on wires which must be strong and elastic.

Rests at the bottom to place the whole frame on the table should be provided.

The price to be quoted should hold good for a period of one year from the date of letting the contract.

Your quotation should reach this office on or before 12th August 1940.

No. S. P. C. 2925-32, dated 26th July 1940.

To

The Firms dealing in Chemicals.

Enquiry No. 4168.

QUININE SULPHATE.

GENTLEMEN,

Please state if you can undertake to supply 200 lbs. of Quinine Sulphate and if so at what rate f.o.r., Bangalore.

The time required for completing the supply may also be specified.

Your quotation should reach this office on or before the 7th August 1940.

No. S. P. C. 2968-80, Bangalore, dated 27th July 1940.

To

The Firms dealing in Transformer Oils.

Enquiry No. 4169.

TRANSFORMER OIL "A" QUALITY.

GENTLEMEN,

Please be good enough to intimate your best prices for delivery f.o.r., Bangalore and the earliest time of delivery for the materials described below :—

Item No.	*Description of material.*	*Quantity.*
1.	Transformer oil "A" quality	3,000 gallons.

It should be distinctly understood that the acceptance by us of your quotation will be subject to the following conditions :—

Withdrawal from the quotation after it is accepted or failure to make the supply within the specified time or according to specifications will entail cancellations of the order and purchases being made at your expense from other sources in addition to the levy of a penalty of 3 per cent of the value of the order as and by way of liquidated damages. In such an event, the Stores Purchase Committee reserve the right to remove your name from the list of approved firms.

The quotations should be superscribed "Quotations for Transformer Oil "A" quality", with the above enquiry number.

This enquiry will be closed on the 12th August 1940.

Yours faithfully,
MIR SAFDAR HUSSAIN,
Secretary,
Stores Purchase Committee.